

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number  
**WO 2005/003676 A3**

(51) International Patent Classification<sup>7</sup>: **G01S 13/87, F41G 5/08, 7/30**

(21) International Application Number: **PCT/IL2004/000590**

(22) International Filing Date: **1 July 2004 (01.07.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
**156739 2 July 2003 (02.07.2003) IL**

(71) Applicants (*for all designated States except US*): **ELTA SYSTEMS LTD. [IL/IL]; 100 Yitzchak Hanasi Blvd., P.O.B. 330, Order No. E 3549159, 77102 Ashdod (IL). RAFAEL ARMAMENT DEVELOPMENT AUTHORITY LTD. [IL/IL]; P.O.Box 2250, 31021 Haifa (IL).**

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **GOLAN, Oded, M.**

[IL/IL]; 7 Marva Street, 25147 Kfar Vradim (IL). WEISS, Chaim [IL/IL]; 43/10 Harofe Street, 34367 Haifa (IL). LUPA, Israel [IL/IL]; 1/24 Brenner Street, 55201 Kiryat Ono (IL). FISHMAN, Ran [IL/IL]; 53a Meginai-Ha'Galil No. 13, 76200 Rehovot (IL).

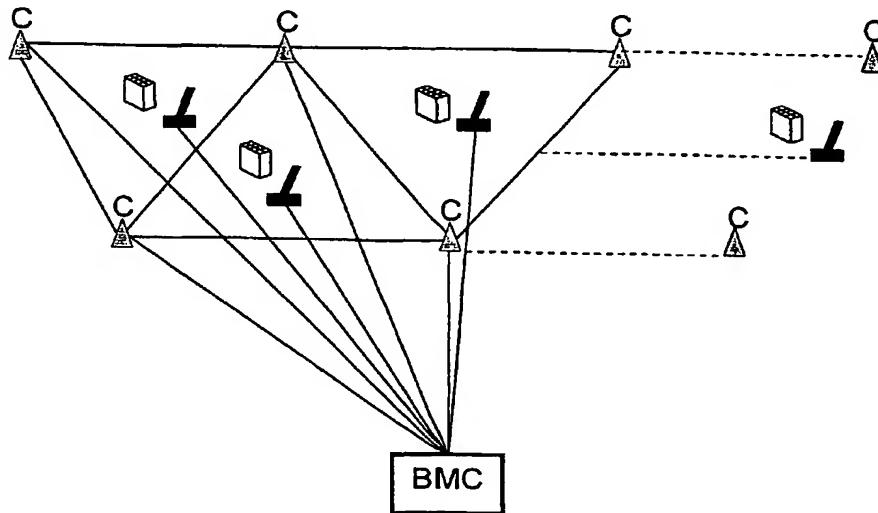
(74) Agent: **REINHOLD COHN AND PARTNERS; P.O.B. 4060, 61040 Tel-Aviv (IL).**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

*[Continued on next page]*

(54) Title: **METHOD AND SYSTEM FOR DESTROYING ROCKETS**



(57) Abstract: A system that includes a synchronized network of three search and track radars and associated processing means and communication channels. The radars are configured to detect and track the target. In response to detected target, an interceptor is launched towards the target. The radars are configured to measure and track the target and the interceptor. The target and interceptor ranges are accurately measured by the radars in the synchronized network, giving rise to synchronized accurate range measurements that are combined by range triangulation to provide accurate target and interceptor position measurements irrespective of the angular measurement accuracy of each radar. The processing means are configured to utilize the measurements to calculate interceptor maneuvers required to overcome errors and bring the interceptor close to a target. The maneuver commands are transmitted to the interceptor using the communication channel. The interceptor is equipped with kill mechanism designed to destroy a target warhead when the interceptor approaches the target.

**WO 2005/003676 A3**



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:  
10 March 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*